DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-005852 Address: 333 Burma Road **Date Inspected:** 18-Mar-2009

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1830 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: ZPMC and ABF **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component:** SAS tower

Summary of Items Observed:

Bay #10 South and North Tower Shop

North Tower Lift #1:-Caltrans QA Inspector observed seven welders performed FCAW build up weld metal welding on stiffeners which located at exterior bottom tower of skin plate C and D. The buildup metal welding has been approved by Caltrans with file #CWR-00087. The metal buildup on skin plate C is 50mm to 60mm thick and skin plate D is 25mm to 30mm thick. The FCAW welding was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

North Tower Lift #2:-Caltrans QA Inspector observed seven ZPMC workers in process fit up for 53m and 56m elevation interior diaphragms on skin plate A of north tower lift 2. After the diaphragms have been secured, a numerous temporary supply angle bars have been welded attach to the diaphragms by two ZPMC welders. Base on Caltrans observation, no discrepancies were noted.

South Tower Lift #2:- Caltrans QA inspector observed four ZPMC welding operators performed semi-automatic SAW on outer corner longitudinal seam weld # SSD1-TL5B/L-2A and SSD1-TL5 B/L-3A which connected skin plate A to B skin plate and B to C skin plate of east tower lift #2. The weld designed is a double -V-groove with welding conducted in the in flat position (1G). The minimum preheat and maximum interpass temperature requirements for SAW longitudinal seam weld are 110C degree and 230 C degree. The semi-automatic SAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

Summary of Conversations:

As noted within the report above.

WELDING INSPECTION REPORT

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Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer